



SEQUENCE LISTING

<110> Inouye, Roger T.
Torres-Viera, Carlos
Moellering, Robert
Gold, Howard
Eliopoulos, George M.

<120> METHODS AND COMPOSITIONS FOR RESTORING ANTIBIOTIC
SUSCEPTIBILITY IN GLYCOPEPTIDE-RESISTANT ENTEROCOCCUS

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<150> US 60/149,313

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<210> 5
<211> 27
<212> DNA
<213> Enterococcus faecium

<400> 5
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27

<210> 6
<211> 30
<212> DNA
<213> Enterococcus faecium

<400> 6
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30

<210> 7
<211> 18
<212> DNA
<213> Enterococcus faecium

<400> 7

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<210> 16
<211> 38
<212> DNA
<213> Enterococcus faecium

<400> 16
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<210> 17
<211> 32
<212> DNA
<213> Enterococcus faecium

<400> 17
caucaucauc auggagacag gagcatgaat ag 32

<210> 18
<211> 696
<212> DNA
<213> Enterococcus faecium

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tgtatagaca agtctgagat tgaccttgcc atattggaca tcatgcttcc cggcacaagc 180
ggccttacta tctgtcaaaa aataagggac aagcacacct atccgattat catgctgacc 240
gggaaagata cagaggtaga taaaattaca ggggttaacaa tcggcgcgga tgattatata 300
acgaagccct ttcgcccact ggagttaatt gctcgggtaa aggccagtt gcgccgatac 360
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ctatttcattg agatatgggg cgacgaatat ttcagcaaga gcaacaacac catcaccgtg 600
catatccggc atttgcgcg aaaaatgaac gacaccattg ataatccgaa atatataaaa 660
acggtatggg gggttgggta taaaattgaa aaataa 696

<210> 19
<211> 1155
<212> DNA
<213> Enterococcus faecium

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atccgaggga aacttgggga ttggatctta agtatttttg aaaacaaata tgacttaaat 180
cacctggacg cgatgaaatt atatcaatat tccatacggga acaatataga tatctttatt 240
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gatgaatttt atcctcagct ttccgcacat ggaaaacagg cggttattca cgccccgag 780
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<210> 20
 <211> 969
 <212> DNA
 <213> Enterococcus faecium

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aacgccaat	ccgcgccttt	caatcaatgt	atcagtgtgg	gacataaatc	agagatttcc	180
gcctctattc	ttcttgcgct	gaagagagcc	ggtgtgaaat	atatttctac	ccgaagcatc	240
ggctgcaatc	atatagatac	aactgctgct	aagagaatgg	gcatcactgt	cgacaatgtg	300
gcgtactcgc	cggatagcgt	tgccgattat	actatgatgc	taattcttat	ggcagtacgc	360
aacgtaaaat	cgattgtgct	ctctgtggaa	aaacatgatt	tcaggttgga	cagcgaccgt	420
ggcaaggtag	tcagcgacat	gacagtgtgg	gtggtgggaa	cgggccagat	aggcaaagcg	480
gttattgagc	ggctgcgagg	atgttgatgt	aaagtgttgg	cttatagtcg	cagccgaagt	540
atagaggtaa	actatgtacc	gtttgatgag	ttgctgcaaa	atagcgatat	cgttacgctt	600
catgtgccgc	tcaatacggg	tacgcactat	attatcagcc	acgaacaaat	acagagaatg	660
aagcaaggag	catttcttat	caatactggg	cgcggtccac	ttgtagatac	ctatgagttg	720
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catgaatag						969

<210> 21
 <211> 1032
 <212> DNA
 <213> Enterococcus faecium

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attggaatta	cgaaatctgg	tgtatggaaa	atgtgcgaaa	aaccttgccg	ggaatgggaa	180
aacgacaatt	gctattcagc	tgtactctcg	ccggataaaa	aaatgcacgg	attacttggt	240
aaaaagaacc	atgaatatga	aatcaaccat	gttgatgtag	cattttcagc	tttgcattgg	300
aagtcagggt	aagatggatc	catacaagg	ctgtttgaat	tgtccggtat	cccttttgta	360
ggctgcgata	ttcaaaagtc	agcaatttgt	atggacaaat	cgttgacata	catcgttgcg	420
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attgtactga	acgaagtcaa	tactctgccc	ggtttcacgt	catacagtcg	ttatccccgt	960
atgatggccg	ctgcaggtag	tgcacttccc	gaactgattg	accgcttgat	cgtattagcg	1020
ttaaaggggt	ga					1032

<210> 22
 <211> 609
 <212> DNA
 <213> Enterococcus faecium

<400> 22						
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gtagggacat	acgagttggc	tgaatcgctt	ttgaaggcaa	aagaactggc	tgctacccaa	180

gggtacggat	tgcttctatg	ggacgggttac	cgctctaagc	gtgctgtaaa	ctgttttatg	240
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cgaactgaga	tgatttcaaa	aggatacgtg	gcttcaaaat	caagccatag	ccgcggcagt	360
gccattgac	ttacgcttta	tcgattagac	acgggtgagc	ttgtaccaat	ggggagccga	420
tttgatttta	tgatgaacg	ctctcatcat	gcggcaaagt	gaatatcatg	caatgaagcg	480
caaaatcgca	gacgtttgcg	ctccatcatg	gaaaacagtg	ggtttgaagc	atatagcctc	540
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gttaaataa						609

<210> 23
 <211> 912
 <212> DNA
 <213> Enterococcus faecium

<400> 23						
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aaagaacatt	tagaaaatag	tgggacttct	gaaaatacc	aagagaaaac	aattacagaa	180
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aatgatgctg	taaaggggtg	cgttagtc	tttattatta	atagtggcta	tcgagacttt	420
gatgagcaaa	gtgtgcttta	ccaagaaatg	ggggctgagt	atgccttacc	agcagggtat	480
agtgagcata	attcagggtt	atcactagat	gtaggatcaa	gcttgacgaa	aatggaacga	540
gcccctgaag	gaaagtggat	agaagaaaat	gcttggaat	acgggttcat	tttacgttat	600
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ggtttaccac	atagtgcgat	tatgaaagaa	aagaatttcg	ttctcgagga	atatatggat	720
tacctaaaag	aagaaaaaac	catttctggt	agtgtaaatg	gggaaaaata	tgagatcttt	780
tattatcctg	ttactaaaaa	taccaccatt	catgtgccga	ctaattctcg	ttatgagata	840
tcaggaaaca	atatagacgg	tgtaattgtg	acagtgtttc	ccggatcaac	acataactaat	900
tcaaggaggt	aa					912

<210> 24
 <211> 486
 <212> DNA
 <213> Enterococcus faecium

<400> 24						
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aacttgactc	catttactgc	tactgggaat	ttcagagaga	tgatagataa	tggtataatc	180
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ttatatgggt	taagcaataa	gcatatgaat	caaaaaaat	tagacagagt	tattattttt	420
gtagggtatac	ttttgctcgt	attattgctc	gtttaccgta	cccatttaag	aataaattac	480
gtgtaa						486

<210> 25
 <211> 19
 <212> DNA
 <213> Enterococcus faecium

<400> 25	19
cgaataccgc	aagcgacag

<210> 26
 <211> 663
 <212> DNA
 <213> Enterococcus faecium

<400> 26

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aagttctatg	aaaacaccta	tcaactgggt	attcttgata	ttatgctgcc	cggatgaat	180
gggcatgaac	ttctacgtga	atttcgggcg	caaaatgata	ccccattct	gatgatgaca	240
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taa						663

<210> 27
 <211> 1344
 <212> DNA
 <213> Enterococcus faecium

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gaagcacagc	aaacagtaaa	atcctatcag	ccattgggtg	aactgattca	gaatagcgat	180
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tatattgaag	ataaagaggg	aagcgtactc	tatgccacac	cgaatgccga	tacatcaa	300
agtgttaggc	ccgactttct	ttatgtggta	catagagatg	ataatatttc	gattgttgct	360
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<210> 28
 <211> 807
 <212> DNA
 <213> Enterococcus faecium

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gaggaatatt taaacacaga aaaatga

<210> 29
<211> 972
<212> DNA
<213> Enterococcus faecium

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gacaacgcaa aattggccgc tggcaatcaa tgcattagcg taggccataa gtccgaggtt 180
tccgaggcga caattcttgc gctgagaaaag gtcggggtaa aatacatttc taccgcgagc 240
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<210> 30
<211> 1029
<212> DNA
<213> Enterococcus faecium

<400> 30
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atcggaatta caaaaaacgg cgtatggaag ctatgcaaga agccatgtac ggaatgggaa 180
gccgatagtc tccccgccat attctccccg gataggaaaa cgcattggtc gcttgtcatg 240
aaagaaagag aatacgaaaac tcggcgtatt gacgtggctt tcccggtttt gcatggcaaa 300
tgcggggagg atggtgcgat acagggtctg tttgaattgt ctggtatccc ctatgtaggc 360
tgcgatattc aaagctccgc agcttgcgat gacaaatcac tggcctacat tcttcaaaaa 420
aatgcgggca tcgccgtccc cgaatttcaa atgattgaaa aaggtgacaa accggaggcg 480
aggacgctta cctaccctgt ctttgtgaag ccggcacggt caggttcgtc ctttggcgta 540
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<210> 31
<211> 609
<212> DNA
<213> Enterococcus faecium

<400> 31
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atcggcacaa aggccgtggc gcttgcctcg cgcgaagcac aaatccatgc ggcacgcctt 180
ggctacggct tgcttttatg ggtatggatg cggccaaaat ctgcggtgga ctgtttcctg 240
cgttgggcgg cgacgcggga ggacaacctc aaaaaagaaa aatattaccc caatattgag 300

cgagccgagt	tgattacaaa	gggctatgtg	gcctcacaat	ccagccatag	ccgtggaagc	360
acaattgatc	ttacgctcta	ccacttggat	acaggggaac	ttgtttcaat	gggaagcaac	420
ttcgatttta	tggaacgaac	gtcgacccat	acagcaaaaag	ggatagggaa	tgcagaggca	480
caaaatcgaa	gatgcttgcg	taaaatcatg	gaaagcagcg	gatttcagtc	ctatcgcttt	540
gaatgggtggc	actataagtt	gattgatgag	ccataccccg	atacctatct	taattttgct	600
gtttcataa						609

<210> 32
 <211> 828
 <212> DNA
 <213> Enterococcus faecium

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accggatttg	acatgatata	ccaagaaaac	aagggtgttc	acttaaagct	ggcggcaaaag	240
accttaaagc	gcctattgat	aaaaccgggg	gaaacctttt	ctttctggcg	gctgggtacgc	300
catgcggaca	aagatacccc	ctataaagac	ggccttacgg	tggccaatgg	taagctcacc	360
accatgtcgg	gcggcggtat	gtgccagatg	agcaatttac	tattttgggt	gttcctgcat	420
acgccattga	caattatcca	gcgcagcgg	cacgtagtaa	aggagtctcc	agagccaaac	480
agtgacgaga	tcaaaggggt	ggatgcaacc	atctcagagg	gctggattga	tttaaaagt	540
cgaaacgata	ccgactgcac	ctaccaata	tgggtgaccc	tagatgatga	gaaaatcatc	600
ggtcagggtg	tcgccgacaa	acagcctcaa	gcattataca	aaattgcaaa	cggcagttat	660
cagtatgtcc	gtgaaagtgg	cggtatttat	gaatatgcca	aggttgaacg	gatgcaagtt	720
gccttaggta	ccggggaaat	aatagattgc	aagctgcttt	atacaaaaca	atgcaaaatc	780
tgctatcccc	tcccggaaag	tgtggatatt	caggaggcga	accaatga		828

<210> 33
 <211> 1053
 <212> DNA
 <213> Enterococcus casseliflavus

<400> 33						
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atcgggatcg	ccccagatgc	tatggattgg	tacttgata	caggagaact	ggaaaacatc	180
cgacaagaca	cgtgggtgtt	ggatacga	cataaacaga	aaatacagcc	gctattcgaa	240
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attatgcatg	gcaaatacgg	ggaagatggc	agtatccaag	gattgtttga	attgatgaag	360
ctgccttatg	taggctgcgg	ggtggcaggt	tctgccttat	gtatgaacaa	atggctgctg	420
catcaagctg	cagcagccat	tggcgtacaa	agtgcctcta	cgattctctt	gacaaatcaa	480
gccaaccagc	aagaacaaat	cgaagctttt	atccagacc	atggcttccc	agttttcttt	540
aagcctaatt	aagcgggctc	ctcaaaaagg	atcactaaag	tcacctgcgt	tgaagaaatc	600
gcttctgcct	taaaagaagc	ctttacttat	tgttccgcag	tgctcctaca	aaaaaatatt	660
gccgggtgtg	agatcggttg	cggtattttg	ggcaacgact	ctttgactgt	cggtgcttgt	720
gacgccattt	cattagtaga	cggctttttc	gattttgaag	aaaagtacca	gctgatcagc	780
gcaaaaatca	ccgtccctgc	gccattgcct	gaaacgattg	aaaccaaggt	caaagaacaa	840
gctcagctgc	tctatcgtag	tcttggtctt	aaaggctctg	ctcgcacatc	cttttttgct	900
acggagcgag	gagaactata	cttgaatgaa	atcaatacta	tgccgggctt	tacgagtcac	960
tcccgcctatc	ctgccatgat	ggcagcggtc	ggcttatcct	atcaagaact	actacaaa	1020
ctgcttgctt	tagcaaaagga	ggaagtcaaa	tga			1053

<210> 34
 <211> 699
 <212> DNA
 <213> Enterococcus faecium

<400> 34						
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tatctgaaaa	acgatggata	taccgtttat	aaattttata	atggcaagga	tgcactaaag	120
tgtattgaat	ccgtggaact	ggatttagcc	atattggata	tcattgcttc	ggatgtagac	180

gggtttcaga	tctgccagaa	aatccgggaa	aagttttact	tcctgttat	catgctgaca	240
gcaaaagtgg	aggacgggga	taaaatcatg	ggactgtccg	tggcggatga	ttatattaca	300
aagccgttta	acccgctgga	agtggttgcg	agagtaaagg	cgcagctgcg	gcagtacatg	360
cgttacaagc	agcccagctt	aaagcaggag	gctgaatgca	cagaatacga	tatcagaggg	420
atgacaatca	gcaagagcag	ccataagtgt	atcctgtttg	gaaaggagat	tcagctgacg	480
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gaggaattat	ttgaggcagt	atggggtgaa	cggttttttg	acagcaataa	tactgtgatg	600
gcgcataatc	ggcggctccg	ggagaaaatg	aaggaaccgt	caagaaatcc	gaaatttata	660
aaaactgtgt	ggggagtggt	atataccatt	gaaaaatag			699

<210> 35

<211> 1146

<212> DNA

<213> Enterococcus faecium

<400> 35

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tttatcttaa	aagataattt	tgcaaagtgc	gtggtagcca	ttttagacag	ctttatctat	180
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cttttctga	tagcggttat	ggcgtgtttt	tttatgatct	tcgcccgta	tctggacagt	300
atttcaaaat	attttaagga	gatcaaccgg	gggatcgata	ctttggtgaa	tgaggatgcc	360
aacgatattg	ggctgcctcc	ggagttggct	tcgaccgaaa	gaaaaatcaa	ttccatacgg	420
cataccctga	cgaaacggaa	aacggacgct	gagcttgacg	agcaaaggaa	aaacgatctt	480
gtcatgtatc	tggcccatga	cctgaagacc	ccgcttccat	cggtcatagg	atatttgaac	540
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ggggccgggt	tggggcttgc	cattgcaaaa	gagattgtgg	aactgcacca	tggacagatc	1080
actgccacac	gcgaaaatgg	tatcaccagt	tttgagggtta	cattgcccgt	cgtaggaaaa	1140
tcgtaa						1146

<210> 36

<211> 1071

<212> DNA

<213> Enterococcus faecium

<400> 36

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aaaagaaaaat	tgctttttta	cagggtgca	tgtgtcacac	tttgtttgct	cattgtttct	120
gtaattctttg	gagttgtgca	ttttttaggg	gagagtaaag	atcccggcct	tttatccaaa	180
gaaaacacaa	aaacagacaa	gaactattcg	tggcttaccg	acgatcagaa	tgaggcagta	240
ccctcagttc	cagagccagc	catatccgac	caggctaaca	aaatttcggg	aaatatcaca	300
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gacaatccta	tcatttcgga	gattgtagcg	agttattcat	cctatgaaaa	atgggtcaaac	840
ggaagagagg	tcacttacaa	caattccaat	gagcttctcg	atccgaacag	tccctattac	900
cgtccggagg	ttatcggttt	gaaaacagga	accagcagtc	ttggcggcgc	atgtattggt	960
tctgcagcgg	tgatggacgg	agaaacctat	atctgtgtag	ttatgggttc	tacaaaggaa	1020
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<210> 37
 <211> 969
 <212> DNA
 <213> Enterococcus faecium

<400> 37
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 agcaatgctg gattagctaa tggatgcccg tgtgtaagcg taagccataa agcggagcta 180
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 gtagaatact cgccgggaag tgtggccgat tataccgtca tgctgatgct tatgctgatg 360
 cgtggcacaa agtcgattct gcgtgaaacc cagaggcaga attattgcct gaatgacctg 420
 cgcgaaaaag aactgcggga tatgaccgtg ggtgtgttag gaactggcg aatcggacag 480
 gcagtcatgg agcgcctgga gggattcggg tgttaaggat tggcgtatga ccgaaatcaa 540
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 gaaggtatct ttaccatga ctgcaccaa agaagaatag aacatccttt cctgtcggtc 840
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<210> 38
 <211> 1032
 <212> DNA
 <213> Enterococcus faecium

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 attggaatca caaaatccgg cgtttggaaa atgtgtgaaa aaccttgttt ggagtgggaa 180
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<210> 39
 <211> 609
 <212> DNA
 <213> Enterococcus faecium

<400> 39
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 atgggaacga aggagctggg agttgctttg cgtaaggctc agaagatggc ggagaagcta 180
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 acggttgacc ttacaatttt tcatttgaat agcggtatgc ttgttcctat ggggtggagat 420

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gaatggtggc	attacgtctt	ggcggacgag	ccatacccg	atacatattt	tgatttttgc	600
attgcctag						609